What Is Claimed Is:

1. A computer program for visualizing at least a portion of a synchronized optical network (SONET) ring, the computer program comprising instructions for:

provkding one or more menus from which a user may specify specific components of the SONET ring;

calculating and drawing a graphical representation of the SONET ring illustrating each node and link of the SONET ring specified by the user;

receiving a user selection for identifying one node of the SONET ring;

accessing an inventory system for data related to the user selection; and

displaying more detailed information about the selected node.

2. The computer program of claim 1 wherein the more detailed information includes individual information about any links connected to the selected node.

3. The computer program of claim 1 wherein the more detailed information includes individual information about any drop ports on the selected node.

4. The computer program of claim 1 wherein the instructions for calculating and drawing a graphical representation of the SONET ring include:

determining a percent consumed and a percent spare capacity for each node and graphically displaying the percentages with the graphical representation of the node.

1   5.   The computer program of claim 4 wherein the instructions for
2   calculating and drawing a graphical representation of the SONET ring further
3   include:
4   determining a percent restricted and a percent pending for each node and
5   graphically displaying the percentages with the graphical representation of the node.

1   6.   The computer program of claim 1 wherein the instructions for
2   calculating and drawing a graphical representation of the SONET ring include:
3   determining a consumed or spare status for each link and graphically
4   displaying the status with the graphical representation of the link.

1   7.   The computer program of claim 1 wherein the instructions for
2   calculating and drawing a graphical representation of the SONET ring include:
3   determining a utilized drop port for each node and link connection and
4   graphically displaying the utilized drop port with the graphical representation of the
5   node.

1   8.   The computer program of claim 1 wherein the instructions for
2   calculating and drawing a graphical representation of the SONET ring include:
3   determining whether each node serves as a hub and graphically displaying a
4   hub designation with the graphical representation of the corresponding node.

1   9.   The computer program of claim 1 wherein user selection for the node is
2   a default selection.

1   10.   The computer program of claim 1 further comprising instructions for:

2   receiving a user selection for identifying one link of the SONET ring; and

3   displaying more detailed information about the identified link.

1   11.   The computer program of claim 11 wherein the more detailed

2   information about the identified link includes a consumption status.

1   12.   A monitoring system for providing interactive topology information

2   about a ring-type network, the monitoring system comprising:

3   an inventory system connected to the ring-type network for collecting status

4   data from the ring-type network in a raw format; and

5   a computer system capable of retrieving raw format status data from the

6   inventory system, and further including:

7   means for providing one or more menus from which a user may specify

8   specific components of the ring-type network;

9   means for calculating and drawing a graphical representation of the

10   ring-type network illustrating each node and link of the ring-type network

11   specified by the user;

12   means for receiving a user selection for identifying one component of

13   the ring-type network; and

14   means for displaying more detailed information about the selected

15   component.

1   13.   The monitoring system of claim 12 wherein the more detailed

2   information about the selected component includes a consumption status.

1   14.   The monitoring system of claim 12 wherein the selected component is a

2   node of the ring-type network.

1   15.   The monitoring system of claim 14 wherein the more detailed

2   information includes individual information about any links connected to the selected

3   node and individual information about any drop ports on the selected node.

1   16.   The monitoring system of claim 14 wherein the means for calculating

2   and drawing a graphical representation of the ring-type network includes:

3   computer instructions for determining a percent consumed and a percent spare

4   capacity for each node and graphically displaying the percentages with the graphical

5   representation of the node.

1   17.   The monitoring system of claim 14 wherein the means for calculating

2   and drawing a graphical representation of the ring-type network further includes:

3   computer instructions for determining a percent restricted and a percent

4   pending for each node and graphically displaying the percentages with the graphical

5   representation of the node.

1   18.   The monitoring system of claim 14 wherein the means for calculating

2   and drawing a graphical representation of the ring-type network includes:

3   computer instructions for determining a consumed or spare status for each

4   link and graphically displaying the status with the graphical representation of the
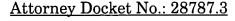
5   link.

1   19.   The monitoring system of claim 14 wherein the means for calculating
2   and drawing a graphical representation of the ring-type network includes:
3   computer instructions for determining a utilized drop port for each node and
4   link connection and graphically displaying the utilized drop port with the graphical
5   representation of the node.

1   20.   The monitoring system of claim 14 wherein the means for calculating
2   and drawing a graphical representation of the ring-type network includes:
3   computer instructions for determining whether each node serves as a hub and
4   graphically displaying a hub designation with the graphical representation of the
5   corresponding node.

1   21.   The monitoring system of claim 12 wherein the ring-type network is a
2   synchronized optical network, and the inventory system is a trunks integrated record
3   keeping system.

1   22.   The monitoring system of claim 14 wherein the more detailed
2   information includes a mismatch identifier about any links that are inventoried
3   differently by connecting nodes.

1   23.   The monitoring system of claim 14 wherein the more detailed
2   information includes an indicator that service is dropping at a specific node.

1   24.   The monitoring system of claim 12 wherein the more detailed
2   information identifies bandwidth usage between two nodes.

1   25.   The monitoring system of claim 12 wherein the more detailed
2   information identifies drop ports connected to a specific link.

1   26.   A monitoring system for providing interactive topology information
2   about a ring-type network, the monitoring system comprising:
3   an inventory system connected to the ring-type network for collecting status
4   data from the ring-type network in a raw format; and
5   a computer system including a system interface capable of retrieving raw
6   format status data from the inventory system and a graphical user interface for
7   providing one or more menus from which a user may specify specific components of
8   the ring-type network, for calculating and drawing a graphical representation of the
9   ring-type network illustrating each node and link of the ring-type network specified
10   by the user, for receiving a user selection for identifying one component of the ring-
11   type network, and for displaying more detailed information about the selected
12   component.

1   27.   The monitoring system of claim 26 wherein the more detailed
2   information about the selected component includes a consumption status.

1   28.   The monitoring system of claim 26 wherein the selected component is a
2   node of the ring-type network.